



Quantum LaserTech – Driving Business Innovation with Laser and Quantum Technologies

Dr. Michael Mei, Managing Director

Audimax II TUHH, 22.05.23, 13:15 – 14:00



In the presentation I will give an introduction into precision metrology, focusing on the optical frequency comb technology. Some of the groundbreaking applications enabled by femtosecond lasers, ultrastable lasers and optical frequency combs will be highlighted, spanning from the pioneering experiments to latest use in optical clocks, quantum sensing, and quantum computing. In parallel, I will present the evolution of the company from a spin-off of the Max-Planck Institute of Quantum optics to a market leader in precision metrology from the perspective of one of its founders.

Speaker: Dr. Michael Mei received his Master in Science in 1994 from the University of Massachusetts, USA, during a one year scholarship on a topic in theoretical physics. In 1996, he received his Diploma from the University of Konstanz, Germany, with a thesis on laser cooling of atoms in a joint project with the University of New York at Stony Brook working under the supervision of Prof. Mlynek and Prof. Metcalf. In 1997 he joined the Swiss Federal Institute of Technology in Zürich doing a one year research project on nonlinear optics. He then went on back to Germany joining the group of Prof. Hänsch at the Ludwig-Maximilians University and the Max-Planck-Institute of Quantum Optics in Munich. In February 2001, Michael received his doctoral degree with honors for experiments in multiple beam atomic interferometry and precision measurements. In May 2001, he founded Menlo Systems together with his colleague Dr. Holzwarth and his supervisor Prof. Hänsch with the vision to commercialize the Optical Frequency Comb Technology that has been invented at the Max-Planck-Institute of Quantum Optics. Since the start in 2001, he is in the role of the Managing Director of the company which has grown from the founders team to a market leader in photonics with more than 175 employees in 2023 with locations in Germany, USA, China, and Japan. Other activities: - Member of the advisory board Quantum Life Long Learning, a project of the Munich universities for the development of a structured education and training program in quantum technology - Speaker of the advisory board of terraplasma GmbH, Garching.